

## Claims

1. A method of real-time service allocation of cars to respond to hall calls, comprising:
  - recording (38) the time that each hall call (21) is registered;
  - determining (56) for each car that is available to answer hall calls in the elevator system, the predicted remaining response time for such car to reach each such call;
  - determining (62) the predicted wait time for each car to answer a call as the summation of the predicted remaining response time for that car to reach the call and the amount of time for which that call has remained unanswered currently;
  - characterized by:
    - providing (62-65) a matrical table having an entry for each car with respect to each possible hall call in the system, said table having an indication of whether said predicted wait time for each car to reach each outstanding call is less than (63) a predetermined wait time limit;
    - for each car, determining (94) whether there is any other car in the system that can reach a call in the direction and at the committable floor of that car, or not; and
    - causing a particular car to stop (87) at its committable floor only if there is a car call in said particular car for that floor (86) or if there is no other car that can reach that call within said wait time limit, as indicated by said matrical table.
2. A method according to claim 1 wherein said wait time limit is adjusted upwardly (73, 132) in heavy traffic and downwardly (116, 137) in light traffic.